

Do Foliar Corn Fungicides Pay?

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The search for higher corn yields, fueled by high prices, resulted in 2007 becoming a record year for the number of acres that received a foliar fungicide. Now that the corn is in the bin, the question remains, “did it pay for itself last year?” Even more importantly, “will it pay for itself next year?” When looking at data from replicated fungicide trials across the Midwest, the answer is “maybe-sometimes-depends.”

If one assumes a fungicide application cost of \$20 per acre and a corn price of \$3.50 per bushel, a grower had to have had at least a six bushel/acre increase in corn yield to come out ahead by using a fungicide. The multi-state data in 2007 indicates that this occurred only 38 percent of the time. Obviously, if corn is worth more than \$3.50, then the likelihood of getting a positive return is better; so, using a corn price of \$4.50 per bushel increases the number of trials where fungicide paid off to around 48 percent. You could just about flip a coin and guess heads or tails if you are just going to randomly choose fields to use a fungicide on.

What can you do to improve your odds? If the primary purpose of a fungicide is to prevent fo-

liar diseases, then we would assume that more disease-susceptible hybrids would be more apt to respond to the use of a fungicide. This was, in fact, the case last year. If we separate out the hybrids that had only poor to fair resistance to gray leaf spot, then the fungicide application paid for itself 52 percent of the time with \$3.50 corn and about 65 percent of the time with \$4.50 corn.

Good managers can increase their odds of getting a positive return by simply scouting prior to application to determine if diseases are actually present. The risk of foliar diseases in corn is highly influenced by environmental conditions during the growing season. Disease pressure is higher under wet, humid conditions. If it is hot and dry and there are no diseases present at tasseling, then the odds of getting a yield increase from fungicides is greatly diminished. Know your hybrid's characteristics, including both yield potential and disease resistance. A high-yielding, disease-susceptible hybrid is more likely to respond to a fungicide when disease is present. And while there are disease-resistant hybrids available, it doesn't make sense to plant them if they don't yield well. Ideally, find a high-yielding hybrid with a good disease package and then get out and scout. Δ

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